Please replace the paragraph beginning at line 13 of page 6 with the following rewritten paragraph:

A2

The crucible 9 is heated with the aid of an electrical heating means 17 to which heating energy is supplied via leads 19 from a controlled power supply, not illustrated. The anode arrangement 5 is generally the same as the arrangement as described in the said patent publication PCT/EP 99/00768 which is incorporated herein in its entirety by reference.

Please replace the paragraph beginning at line 13 of page 8 with the following rewritten paragraph:

A3

Abutments 55 are fixedly arranged on the baffle arrangement ~~43, which via~~ springs 57 bias bearings 59 of the shaft 29 toward the anode arrangement 5. This means that the brass cylinder 21 has its peripheral cylinder face 25 thrust against roller bearings 61 arranged adjacent to the baffle opening 45 in the evaporation-inactive part 41 of the peripheral cylinder face 25. This means that with the progress of removal of material from the brass cylinder 21 owing to the evaporation action by the arc discharge 35 and the grinding by the drag member 51 and the resulting reduction in diameter of the brass cylinder 21, the evaporation-active part 27 of the peripheral cylinder face 25 is always kept in substantially the same spatial relationship to the baffle opening 45 and the anode arrangement 5 so that it is possible to maintain arc discharge which is substantially constant in time independently of the removal of material from the brass cylinder 21.

Please replace the paragraph beginning at line 24 of page 8 with the following rewritten paragraph:

A4

In an intermediate space 63 between the peripheral cylinder face 25 and the baffle 43, a gas, as for example oxygen, is introduced via a line 65. At least a part of the gas supplied

via the line 65 escapes from the intermediate space 63 through the baffle opening 45 toward the gas space between the silicon melt 11 and the beverage bottle 3, as indicated by the arrows 65 in figure 2. The resulting gas current 35 is directed oppositely to the direction 47 of movement of the particles leading to an undesired deposit on the peripheral cylinder face 25. In this respect, gas particles 35 will collide with the current of undesired particles 47 and deflect same from their path through the baffle opening 45 and prevent later deposit on the peripheral cylinder face 25 so that the undesired effect of deposit of material on the peripheral cylinder face 25 is also reduced.

A4 Cont

Please replace the paragraph beginning at line 5 of page 9 with the following rewritten paragraph:

Figure 3 shows a further embodiment of the invention, which is generally similar to the previously described embodiments and only differs regarding a different configuration of the cathode material body, which is as well in the form of a brass cylinder 21a though being able to be rotated about an axis 23a of rotation extending toward an anode arrangement 5a so that an evaporation-active part 27a of the surface of the brass cylinder 21a is arranged on one end face of the cylinder 21a. On rotation of the brass cylinder 21a by a motor 49a about the axis 23a of rotation, the evaporation-active part 27a will describe an annular surface on the cylinder floor 71. The evaporation-active part 21a of the cylinder floor face 71 is, in this case, defined by a baffle opening 45a of a baffle arrangement 43a shading off the remaining part of the cylinder floor surface.

A5

Please replace the paragraph beginning at line 15 of page 9 with the following rewritten paragraph:

In the case of the electrode arrangement 1b depicted in figure 4, the brass body is designed in the form of a rod 41b extending in the longitudinal direction whose flat side 25b facing an anode arrangement 5b is substantially shaded by a baffle arrangement 43b, in which a baffle opening 45b is practiced to limit an evaporation-active part 27b on the flat side 25b.

A6

Springs 53b, which bear against the baffle arrangement, 43b, engage the flat side 73, which is directed away from the flat side 25b, of the brass rod 41b, such springs thrusting the rod 41b at its flat side 25b toward the anode arrangement 5b and against drag members 51b, which are secured to the baffle arrangement 43b. The brass rod 41b is coupled with a drive rod 75, which for its part is joined with a drive, not illustrated in figure 4, in order to reciprocate the rod 41b. Owing to the reciprocation, the evaporation-active part 27b of the flat side 25b is also reciprocated on same so that gradually different areas of the flat side 25b act as evaporation-active parts 27 so that the unfavorable effect of the deposit of particles 47b is reduced, which originate from the silicon melt 11b.

Please replace the paragraph beginning at line 28 of page 9 with the following rewritten paragraph:

Figure 5 diagrammatically shows an electrode arrangement 1c with an anode arrangement 5c, which also includes a silicon melt 11c, and a cathode arrangement 7c. The cathode arrangement 7c comprises, in this case, a cathode material ring 21c of brass, which is stationary in relation to the anode arrangement 5c and is arranged centrally above the silicon melt 11c. Radially within the brass ring 21c, an annular baffle 43c is arranged driven by means of a motor 49c and a friction roller 81 for rotation about its axis 83 of symmetry. The annular baffle 43c shades off a large part of the peripheral cylinder face 25c of the brass ring 21c, while a plurality of baffle openings 45c distributed in the peripheral direction in the annular baffle 43c expose evaporation-active part 27c on the cylinder inner face 25c of the brass ring 21c to the arc discharge 35c, all other areas of the cylinder inner face 25c being shaded off, as evaporation-inactive parts 41c, from the arc discharge 35c. The rotation of the annular baffle 43c about its axis 83 means that the evaporation-active parts 27c are moved in the peripheral direction over the cylinder inner face 25c of the brass ring 21c so that progressively the entire inner face 25c is subjected to the cleaning action due to the intensive arc discharge 35c in order to remove material deposits, originating from the silicon melt 11c, thereon.

Please replace the paragraph beginning at line 22 of page 10 with the following rewritten paragraph:

In the case of the embodiments depicted in figures 6 and 7, it is a question of stationary electrode arrangement, in which both the baffle and also the cathode are stationary, that is to say they are non-rotary or are able to be moved in translation for operations. In the embodiment of figure 6, the baffle is referenced 43d, it fitting over the cathode 21d, only indicated in chained lines, like a hood. On its front side, the hood 43d possesses a baffle opening 45d uncovering the evaporation-active part 27d of the cathode 21d for the arc discharge. The remaining parts of the electrode arrangement are of conventional design so that further details of the construction thereof are unnecessary. However, through the gas supply line 80, an inert protective gas, and more particularly oxygen, argon or an oxygen-argon gas mixture or another suitable gas mixture, is supplied to the area of the evaporation-active part 27d of the cathode within the hood 43d from a protective gas source 81 only indicated in chained lines. The protective gas thus introduced directly in front of the cathode surface, which, in the present case, is introduced adjacent to the baffle opening 45d, emerges through the baffle opening 45d together with the particles evaporated from the evaporation-active part 27d of the cathode, through the baffle opening 45d so that a self-supporting plasma, may be produced and maintained independently from the Si vapor cloud. Owing to the decoupling from the Si vapor cloud, the arc discharge, and accordingly the plasma process, may be maintained in a substantially more stable manner constantly for longer process times.

A8

Please replace the paragraph beginning at line 11 of page 11 with the following rewritten paragraph:

In the case of the embodiment of figure 7, in which the same reference numerals are employed as in figure 6, the supply of the protective gas from the rear side of the cathode 21d, that is to say, turned away from the one side, and opposite the baffle opening 45d. This

A9